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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,962	03/13/2001	Mark John LaCour		1181

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EXAMINER

MANOHARAN, VIRGINIA

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/804,962

Applicant(s)

LACOUR, MARK JOHN

Examiner

Virginia Manoharan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-11,13,14,16,17,19,20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 5-11, 13-14, 16-17, 19-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 1-2, 5-11, 13-14, 16, 17, 19-20 & 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1). It is unclear from claim 1, is recited, as to what device removes the accumulated liquid, i.e., claim 1, lines 8-10 recites a “..liquid removal means.... for removing accumulated liquid on said bottom tray from said vessel...”; whereas, claim 1, lines 12-13 recites “..at least one downcomer.... for removal of said accumulated liquid from said bottom tray...”? See also claim 7.

2). Claim 6 appears to be already covered in claim 1. Note the last “wherein” clause and in the second “wherein” clause which recites that the liquid removal means comprises a first conduit.

3). Claim 13 appears to be inconsistent with the “substantially all” recited in the last wherein clause of claim 11. See also claims 19 & 17.

4). The claims or at least part of the claims do not recite positive structural elements of an apparatus. What device sealed off the fluid communication e.g., between the overflow liquid stream and the vapor passed from the reboiler to the separator? See e.g., the “wherein” clauses in claim 17, and the last “wherein” clause in claim 1.

Claims 1-2 and 5-10 are objected to because of the following informalities:

In claim 1, line 11, “..is further characterized to include..” should be --- comprises---. Compare with claim 5, and also the “comprising” in claim 1, line 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-11, 13-17, 19-20 & 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molique (3,230,158) in view of Kraft (2,534,173).

Molique & Kraft are applied for the same combined reasons as set forth at pages 3 and 4 of the previous Office Action.

[It is noteworthy that the liquid head of Molique overlaps or covers the claimed “..liquid head which extends vertically to a level in the range of from said reboiler means inlet up to the level of said bottom tray..” as further claimed, in claim 8. See also the liquid head at col. 4, lines 44-75 discloses in Kraft which renders obvious claim 8].

Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's arguments filed November 20, 2004 have been fully considered but they are not persuasive.

While the downcomer of the Molique reference extends above the top surface of its bottom tray, as argued, however, Molique's downcomer equally extends downwardly from the top surface, as required in claim 1 (amended). Molique also shows vapor delivery (9) being sealed off from fluid flow communication with downcomer (12) and conduit (13) which removes liquid from the downcomer collected from bottom tray (11).

Furthermore, applicant's argument that in the "...Kraft reference, the vapor from line 26 is in fluid flow communication with liquid feeding draw –off pipe 21, which does not meet the above described limitations in amended claim 17..." is not considered well-taken. The spacing between the downcomer (17) to the draw off pipe (21) in the Kraft's reference is enclosed by the weir (20) for the purpose of maintaining a liquid seal at the lower end of the downcome (17). See col. 4, lines 20-22, and col. 5, lines 55-57. Obviously, the devices (16), (17), (20) and (21) are sealed off from (26) in the Kraft's references.

Thus, in the absence of anything which may be "new" or unexpected result," a prima facie case of obviousness has been established by the art and has not been rebutted.

Unexpected results must be established by factual evidence. Mere arguments or conclusory statements in the specification, applicant's amendments, or the Brief do not suffice. In re Lindner, 457 F. 2d 506, 508, 173 USPQ 356, 358 (CCPA 1972). In re Wood, 528, F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 571-271-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

V. Manoharan/af
April 5, 2005

